ABSTRACT OF THE DISCLOSURE

A mathematical expression recognizing device comprises a character recognition unit which recognizes characters in a document image, a dictionary storing

5 a pair of evaluation scores for each type of word, the score showing the possibility of belonging to the text and that of belonging to the mathematical expression, an evaluation unit which obtains the evaluation scores showing the possibility of belonging to the text and

10 that of belonging to the mathematical expression for each of the words included in the recognized characters with reference to the dictionary, and a mathematical expression detecting unit which searches for an optimal path connecting words by selecting one of the text

15 and the mathematical expression based on a formative grammar and the evaluation scores showing the possibility of belonging to the text and that of belonging to the mathematical expression for each of the words, thereby detecting characters belonging to

20 the mathematical expression.